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## **Amendments to the Claims**:

1. (Currently Amended) A fertilizer product comprising particles of a fertilizer in intimate contact with a <u>substantially water-soluble</u> polymer, said fertilizer being selected from the group consisting of phosphate-based fertilizers, organic wastes, waste waters, fertilizers containing nitrogen, phosphorous, potassium calcium, magnesium, sulfur, boron, or molybdenum materials, fertilizers containing micronutrients, and oxides, sulfates, chlorides, and chelates of such micronutrients, said polymer comprising recurring polymeric subunits each made up of at least two different moieties individually and respectively taken from the group consisting of B, and C moieties, or recurring C moieties, where moiety B is of the general formula

$$\begin{array}{c|c}
R_3 & R_4 \\
\hline
C & C \\
\hline
C & C \\
\hline
OR_5 & OR_6
\end{array}$$
or

 $\begin{array}{c|cccc}
R_3 & R_4 \\
\hline
C & C \\
\hline
C & C
\end{array}$ 

or

## and moiety C is of the general formula

$$\begin{array}{c|c} & & & & \\ & & & \\ & & & \\ &$$

or

$$\begin{array}{c|c}
C & C & C \\
\hline
 & C &$$

or

wherein each R<sub>7</sub> is individually and respectively selected from the group consisting of H, OH,  $C_1$ - $C_{30}$  straight, branched chain and cyclic alkyl or aryl groups,  $C_1$ - $C_{30}$  straight, branched chain and cyclic alkyl or aryl formate based ester groups, R'CO2 groups, OR' groups and COOX groups, wherein R' is selected from the group consisting of  $C_1\text{-}C_{30}$  straight, branched chain and cyclic alkyl or aryl groups and X is selected from the group consisting of H, the alkali metals, NH<sub>4</sub> and the C<sub>1</sub>-C<sub>4</sub> alkyl ammonium groups, R<sub>3</sub> and R<sub>4</sub> are individually and respectively selected from the group consisting of H, C<sub>1</sub>-C<sub>30</sub> straight, branched chain and cyclic alkyl or aryl groups, R<sub>5</sub>, R<sub>6</sub>, R<sub>10</sub> and R<sub>11</sub> are individually and respectively selected from the group consisting of H, the alkali metals, NH<sub>4</sub> and the C<sub>1</sub>-C<sub>4</sub> alkyl ammonium groups, Y is selected from the group consisting of Fe, Mn, Mg, Zn, Cu, Ni, Co, Mo, V and Ca, and R<sub>8</sub> and R<sub>9</sub> are individually and respectively selected from the group consisting of nothing (i.e., the groups are non-existent),  $CH_2$ ,  $C_2H_4$ , and  $C_3H_6$ , each of said moieties having or being modified to have a total of two COO groups therein, and wherein the subunits forming the resultant polymer are predominantly dicarboxylic subunits.

- 2. (Original) The fertilizer product of claim 1, said polymer and fertilizer being co-ground together.
- 3. (Original) The fertilizer product of claim 1, said polymer being applied to the surface of said fertilizer.
- 4. (Original) The fertilizer product of claim 1, said fertilizer being in the form of particles having an average diameter of from about powder size to about 10 cm.
- 5. (Original) The fertilizer product of claim 1, said polymer being present in said fertilizer product at a level of from about 0.001 g to about 20 g polymer per 100 g fertilizer.
- 6. (Original) The fertilizer product of claim 1, said polymer being complexed with an ion.
- 7. (Original) The fertilizer product of claim 6, said ion being selected from the group consisting of Fe, Mn, Mg, Zn, Cu, Ni, Co, Mo, V and Ca.
- 8. (Original) The fertilizer product of claim 1, said polymer substantially coating the surface of said fertilizer.
  - 9. (Currently Amended) The fertilizer product of claim 9 8, said product

generating less dust than fertilizers without added polymer.

- 10. (Currently Amended) The fertilizer product of claim 9 8, said coating being applied at a level of at least about 0.01% by weight of the coated fertilizer product.
- 11. (Currently Amended) The fertilizer product of claim 9 8, said coating resulting in the complete inhibition of dust generation.
- step of applying to said plants or to the earth adjacent said plants a growth-enhancing amount of a fertilizer product comprising a fertilizer in intimate contact with a polymer, said fertilizer being selected from the group consisting of phosphate-based fertilizers, organic wastes, waste waters, fertilizers containing nitrogen, phosphorous, potassium calcium, magnesium, sulfur, boron, or molybdenum materials, fertilizers containing micronutrients, and oxides, sulfates, chlorides, and chelates of such micronutrients, said polymer comprising recurring polymeric subunits each made up of at least two different moieties individually and respectively taken from the group consisting of B, and C moieties, or recurring C moieties, where moiety B is of the general formula

$$\begin{array}{c|cccc}
R_3 & R_4 \\
\hline
C & C & \\
C & C & \\
\hline
C & C & \\
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C & C & \\
C & C & \\
\hline
C & C & \\
C &$$

and moiety C is of the general formula

$$\begin{array}{c|c}
 & O \\
 & R_8 \\
\hline
 & C \\
 & C \\
\hline
 & C \\
 &$$

or

$$- \begin{array}{c|c} & & & & \\ & & & & \\$$

wherein each R<sub>7</sub> is individually and respectively selected from the group consisting of H, OH, C<sub>1</sub>-C<sub>30</sub> straight, branched chain and cyclic alkyl or aryl groups, C<sub>1</sub>-C<sub>30</sub> straight, branched chain and cyclic alkyl or aryl based ester groups, R'CO<sub>2</sub> groups, OR' groups and COOX groups, wherein R' is selected from the group consisting of C<sub>1</sub>-C<sub>30</sub> straight, branched chain and cyclic alkyl or aryl groups and X is selected from the group consisting of H, the alkali metals, NH<sub>4</sub> and the C<sub>1</sub>-C<sub>4</sub> alkyl ammonium groups, R<sub>3</sub> and R<sub>4</sub> are individually and respectively selected from the group consisting of H, C<sub>1</sub>-C<sub>30</sub> straight, branched chain and cyclic alkyl or aryl groups, R<sub>5</sub>, R<sub>6</sub>, R<sub>10</sub> and R<sub>11</sub> are individually and respectively selected from the group consisting of H, the alkali metals, NH<sub>4</sub> and the C<sub>1</sub>-C<sub>4</sub> alkyl ammonium groups, Y is selected from the group consisting of Fe, Mn, Mg, Zn, Cu, Ni, Co, Mo, V and Ca, and R<sub>8</sub> and R<sub>9</sub> are individually and respectively selected from the group consisting of nothing (i.e., the groups are non-existent), CH<sub>2</sub>, C<sub>2</sub>H<sub>4</sub>, and C<sub>3</sub>H<sub>6</sub>, each of said moieties having or being modified to have a total of two COO groups therein.

- 13. (Withdrawn) The method of claim 12, said polymer being applied at a level of from about 0.001 lbs. to about 100 lbs. polymer per acre of said growing plants.
- 14. (Withdrawn) The method of claim 12, said fertilizer product being a liquid dispersion of said fertilizer and said polymer.
- 15. (Withdrawn) The method of claim 12, said fertilizer product being a granulated mixture of said fertilizer and said polymer.
- 16. (Withdrawn) The method of claim 12, said fertilizer product being a fertilizer having a polymer coating.
- 17. (Withdrawn) The method of claim 12, said fertilizer being in the form of particles having an average diameter of from about powder size to about 10 cm.
- 18. (Withdrawn) The method of claim 12, said polymer being present in said fertilizer product at a level of from about 0.001 g to about 20 g polymer per 100 g fertilizer.
- 19. (Withdrawn) The method of claim 12, including the step of applying said\ fertilizer product to the foliage of said plants.

- 20. (Withdrawn) The method of claim 12, including the step of applying said fertilizer product to the earth adjacent said plants.
- 21. (Withdrawn) The method of claim 12, said polymer being complexed with an ion.
- 22. (Withdrawn) The method of claim 21, said ion being a metal ion selected from the group consisting of Fe, Mn, Mg, Zn, Cu, Ni, Co, Mo, V and Ca.
- 23. (Currently Amended) A fertilizer product comprising particles of a fertilizer selected from the group consisting of phosphate-based fertilizers, organic wastes, waste waters, fertilizers containing nitrogen, phosphorous, potassium calcium, magnesium, sulfur, boron, or molybdenum materials, fertilizers containing micronutrients, and oxides, sulfates, chlorides, and chelates of such micronutrients, said fertilizer being in intimate contact with a composition comprising a substantially water-soluble dicarboxylic acid polymer having recurring polymeric subunits each made up of at least two different moieties individually and respectively taken from the group consisting of B and C moieties, or recurring C moieties, wherein moiety B is of the general

formula

or

$$\begin{array}{c|c}
R_3 & R_4 \\
\hline
C & C \\
\hline
OR_5 & OR_6
\end{array}$$
or

 $\begin{array}{c|c}
R_3 & R_4 \\
\hline
C & C \\
\hline
OR_5 & OR_6
\end{array}$ 

or 
$$\begin{array}{c|c}
 & R_3 & R_4 \\
\hline
 & C & C \\
\hline
 & C & C
\end{array}$$

and moiety C is of the general formula

wherein each R<sub>7</sub> is individually and respectively selected from the group consisting of H, OH,  $C_1$ - $C_{30}$  straight, branched chain and cyclic alkyl or aryl groups,  $C_1$ - $C_{30}$  straight, branched chain and cyclic alkyl or aryl based ester groups, R'CO2 groups, OR' groups and COOX groups, wherein R' is selected from the group consisting of C<sub>1</sub>- $C_{30}$  straight, branched chain and cyclic alkyl or aryl groups and X is selected from the group consisting of H, the alkali metals, NH<sub>4</sub> and the C<sub>1</sub>-C<sub>4</sub> alkyl ammonium groups, R<sub>3</sub> and R<sub>4</sub> are individually and respectively selected from the group consisting of H, C<sub>1</sub>-C<sub>30</sub> straight, branched chain and cyclic alkyl or aryl groups, R<sub>5</sub>, R<sub>6</sub>, R<sub>10</sub> and R<sub>11</sub> are individually and respectively selected from the group consisting of H, the alkali metals, NH<sub>4</sub> and the C<sub>1</sub>-C<sub>4</sub> alkyl ammonium groups, Y is selected from the group consisting of Fe, Mn, Mg, Zn, Cu, Ni, Co, Mo, V and Ca, and R<sub>8</sub> and R<sub>9</sub> are individually and respectively selected from the group consisting of nothing (i.e., the groups are non-existent), CH<sub>2</sub>, C<sub>2</sub>H<sub>4</sub>, and C<sub>3</sub>H<sub>6</sub>, each of said moieties having or being modified to have a total of two COO groups therein, and wherein the subunits forming the resultant polymer are predominantly dicarboxylic subunits.

24. (Original) The fertilizer product of claim 23, said polymer and said fertilizer being co-ground together.

- 25. (Original) The fertilizer product of claim 23, said polymer being applied to the surface of said fertilizer.
- 26. (Original) The fertilizer product of claim 23, said fertilizer being in the form of particles having an average diameter of from about powder size to about 10 cm.
- 27. (Original) The fertilizer product of claim 23, said polymer being present in said fertilizer product at a level of from about 0.001 g to about 20 g of polymer per 100 g fertilizer.
- 28. (Original) The fertilizer product of claim 23, said polymer being complexed with an ion.
- 29. (Original) The fertilizer product of claim 28 said ion being selected from the group consisting of Fe, Mn, Mg, Zn, Cu, Ni, Co, Mo, V and Ca.
- 30. (Original) The fertilizer product of claim 25, said polymer substantially coating the surface of said fertilizer.
- 31. (Original) The fertilizer product of claim 25, said product generating a decreased amount of dust in comparison to fertilizers which do not have polymer on their surface.

- 32. (Original) The fertilizer product of claim 30, said coating level being at least about 0.005% by weight of the coated fertilizer product.
- 33. (Original) The fertilizer product of claim 30, said product generating little or no dust.
- 34. (Currently Amended) The fertilizer product of claim 33, said product generating no dust after abrasion resistance testing comprising the step of shaking said product for five minutes in a receptacle containing 10 stainless steel balls having a total weight of about 20 grams in accordance with Example 20.
- 35. (Withdrawn) A method of decreasing fertilizer dust comprising the step of coating fertilizer with a polymer, said fertilizer being selected from the group consisting of phosphate-based fertilizers, organic wastes, waste waters, fertilizers containing nitrogen, phosphorous, potassium calcium, magnesium, sulfur, boron, or molybdenum materials, fertilizers containing micronutrients, and oxides, sulfates, chlorides, and chelates of such micronutrients, said polymer comprising recurring polymeric subunits each made up of at least two different moieties individually and respectively taken from the group consisting of B, and C moieties, or recurring C moieties, where moiety B is of the general formula

$$\begin{array}{c|c}
 & R_3 & R_4 \\
 & C & C \\
 & C & C
\end{array}$$
or
$$\begin{array}{c|c}
 & C & C \\
 & C & C
\end{array}$$

$$\begin{array}{c|cccc}
& R_3 & R_4 \\
\hline
& C & C & \\
& C & C & \\
& OR_5 & OR_6
\end{array}$$

or

and moiety C is of the general formula

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or 
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wherein each R<sub>7</sub> is individually and respectively selected from the group consisting of H, OH, C<sub>1</sub>-C<sub>30</sub> straight, branched chain and cyclic alkyl or aryl groups, R'CO<sub>2</sub> groups, OR' groups and COOX groups, wherein R' is selected from the group consisting of C<sub>1</sub>-C<sub>30</sub> straight, branched chain and cyclic alkyl or aryl groups and X is selected from the group consisting of H, the alkali metals, NH<sub>4</sub> and the C<sub>1</sub>-C<sub>4</sub> alkyl ammonium groups, R<sub>3</sub> and R<sub>4</sub> are individually and respectively selected from the group consisting of H, the alkali metals, NH<sub>4</sub> or aryl groups, R<sub>5</sub>, R<sub>6</sub>, R<sub>10</sub> and R<sub>11</sub> are individually and respectively selected from the group consisting of H, the alkali metals, NH<sub>4</sub> and the C<sub>1</sub>-C<sub>4</sub> alkyl ammonium groups, Y is selected from the group consisting of Fe, Mn, Mg, Zn, Cu, Ni, Co, Mo, V and Ca, and R<sub>8</sub> and R<sub>9</sub> are individually and respectively selected from the group consisting of nothing (i.e., the groups are non-existent), CH<sub>2</sub>, C<sub>2</sub>H<sub>4</sub>, and C<sub>3</sub>H<sub>6</sub>, each of said moieties having or being modified to have a total of two COO groups therein.

36. (Withdrawn) The method of claim 35, said polymer coating being at a level of at least about 0.005% w/w.